



1/22

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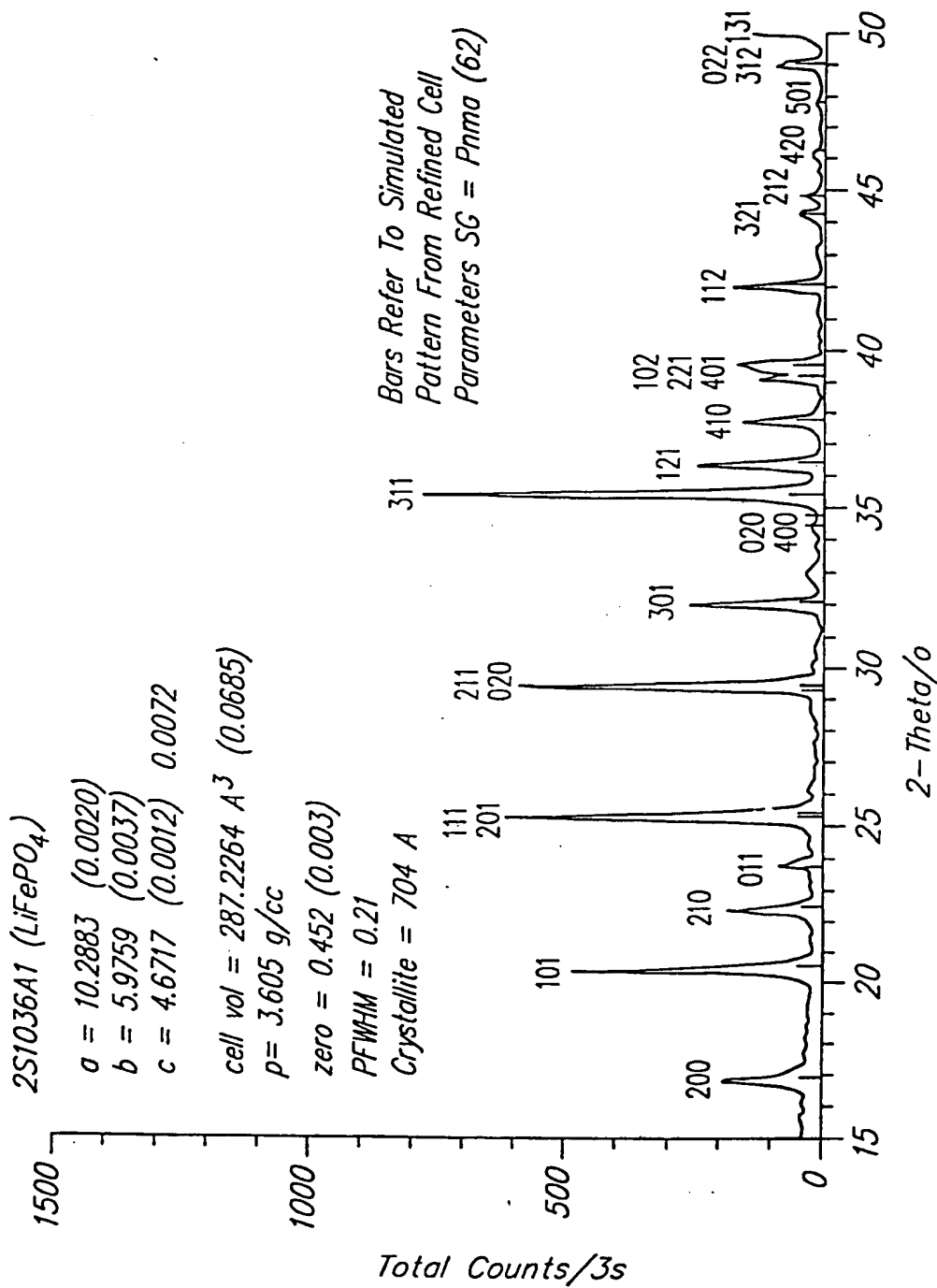


FIG. 1

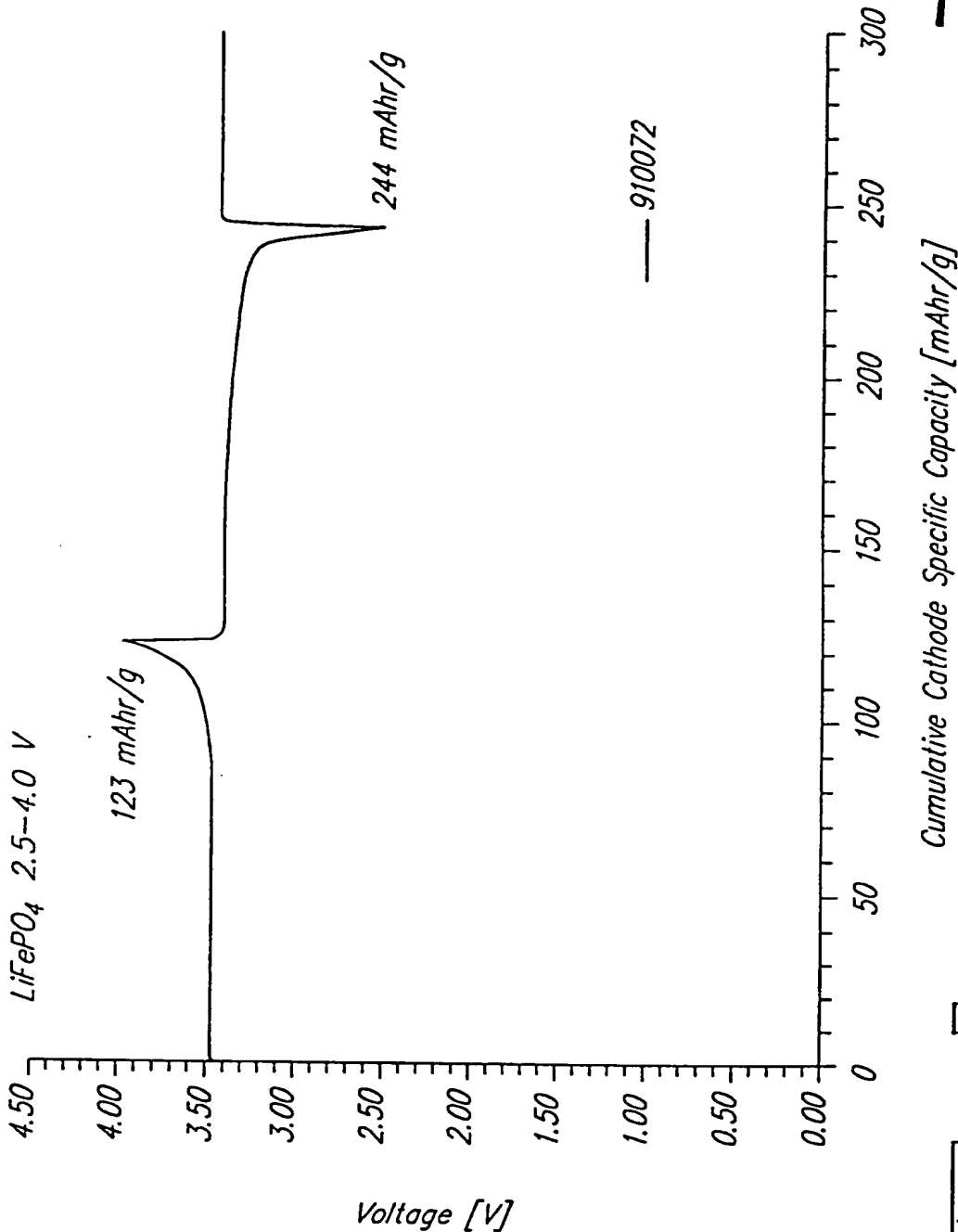


2/22

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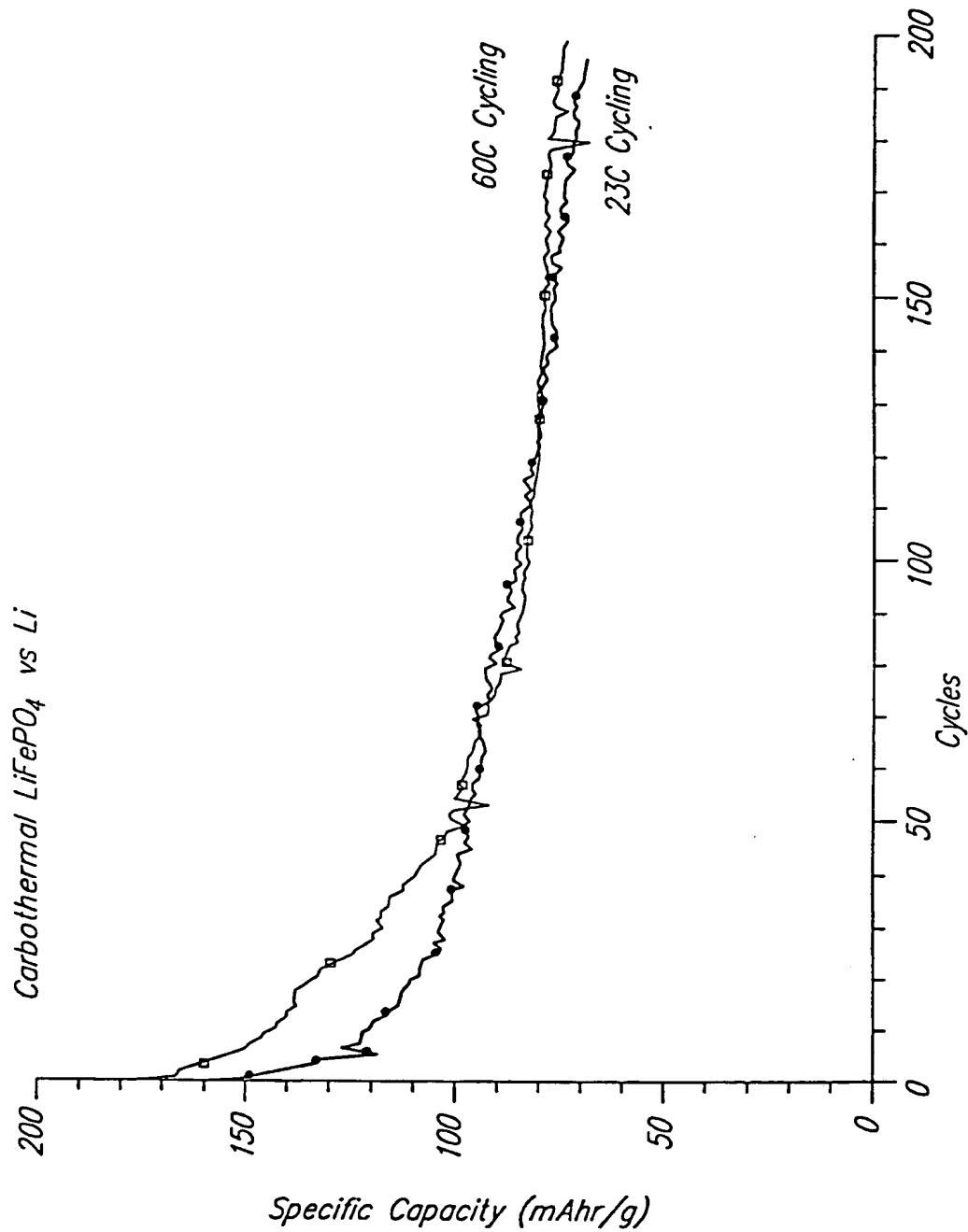
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3/22

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ENCLOSURE

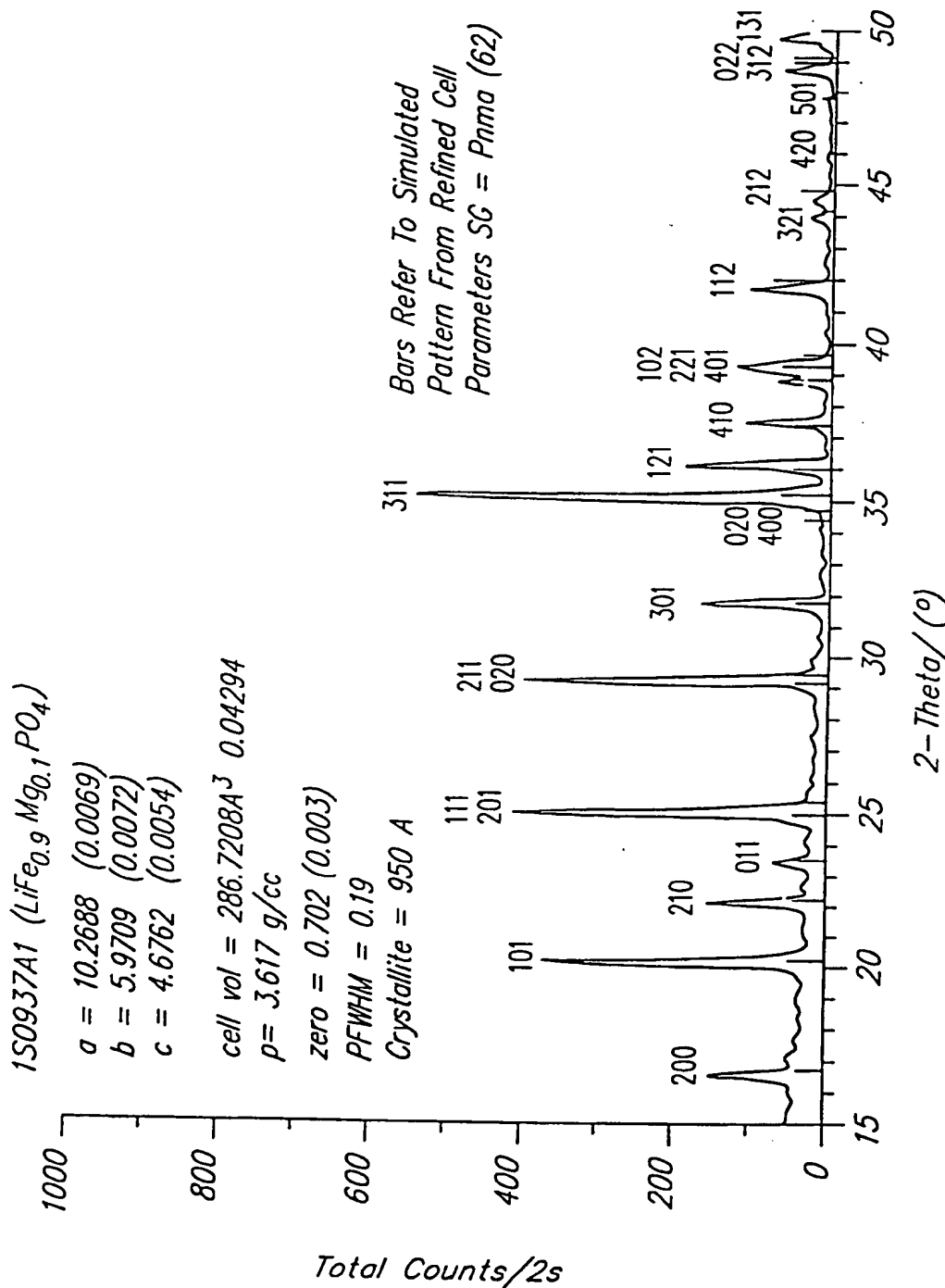


4/22

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5/22

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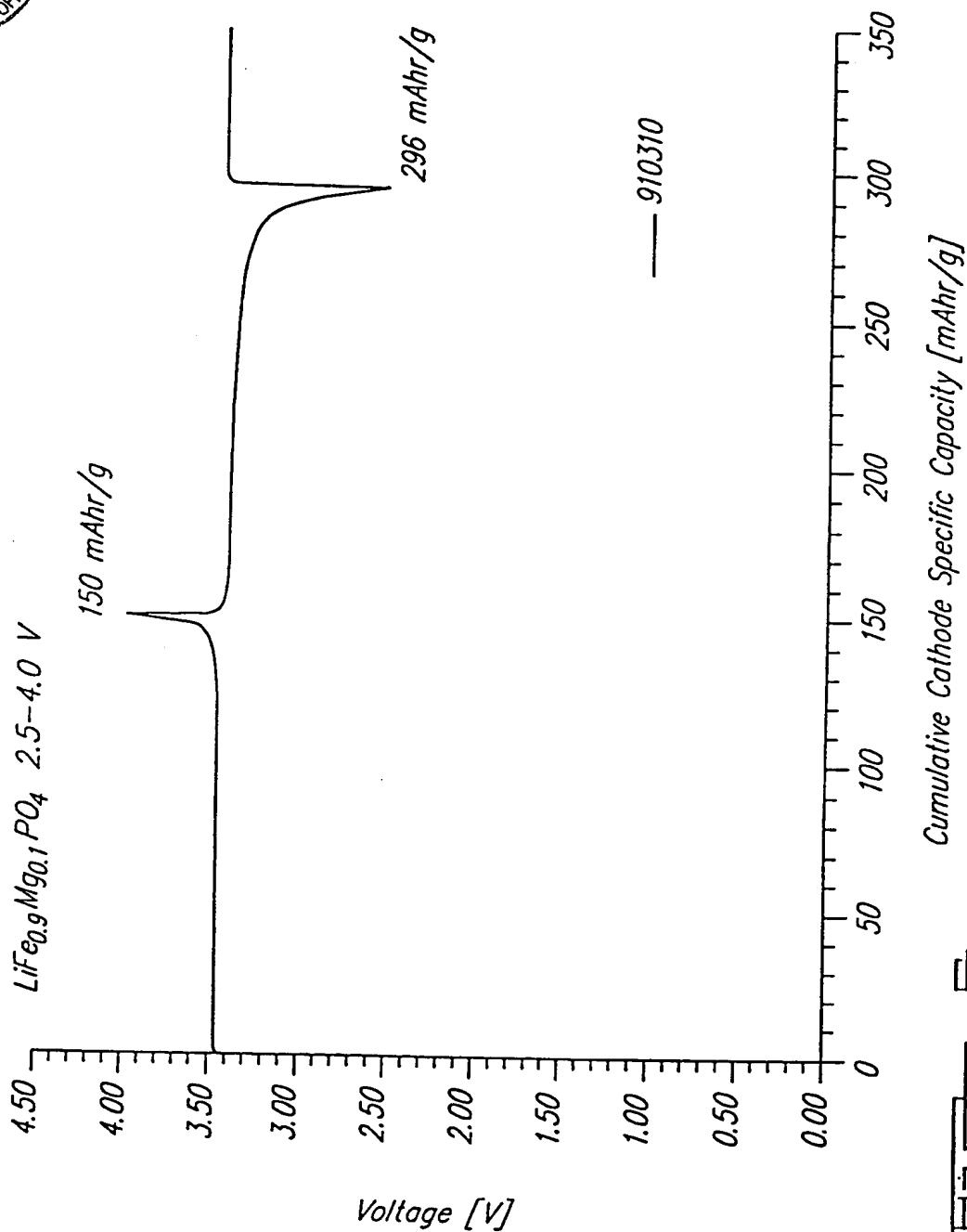


FIG. 5.

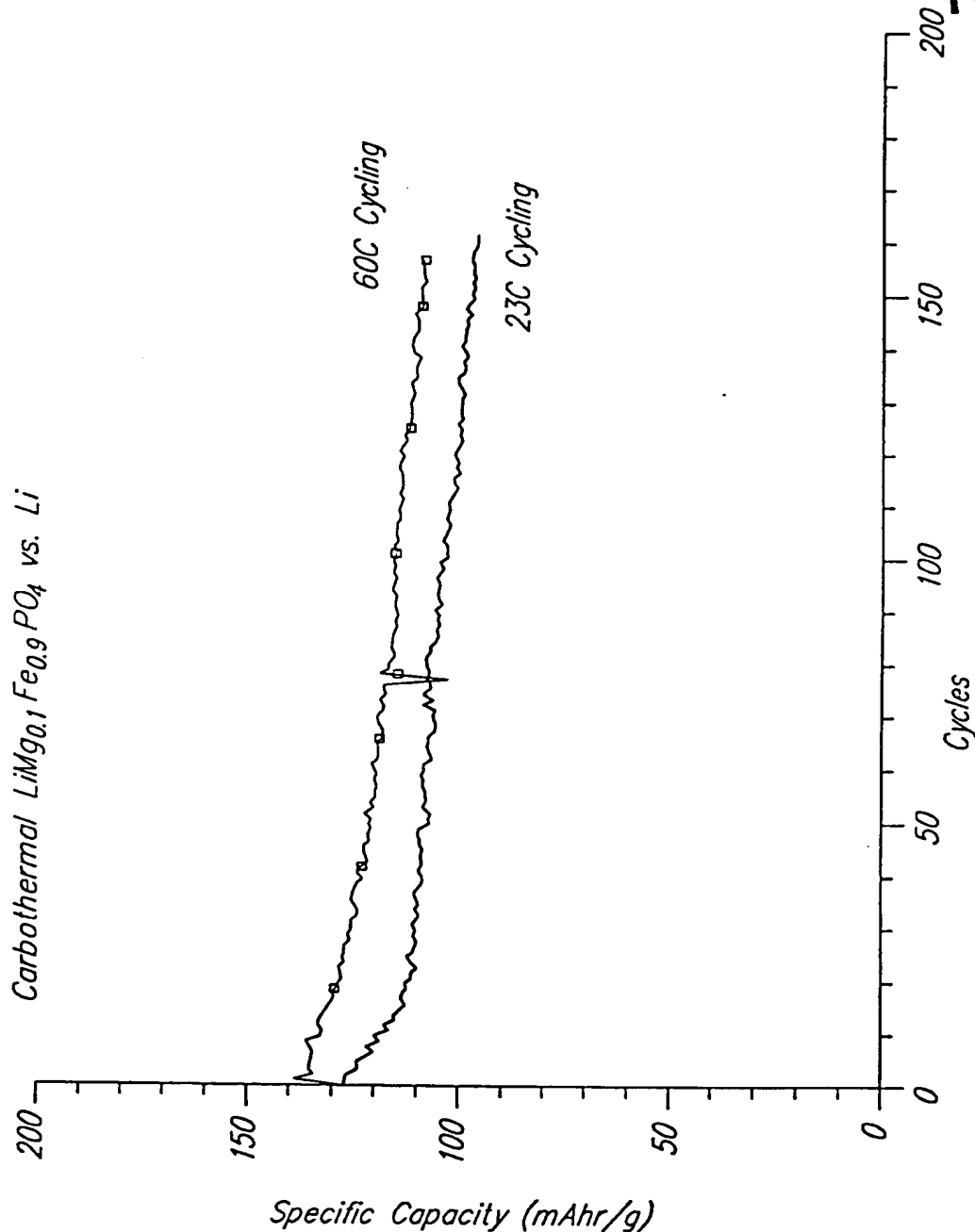


6/22

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TC 1700





7/22

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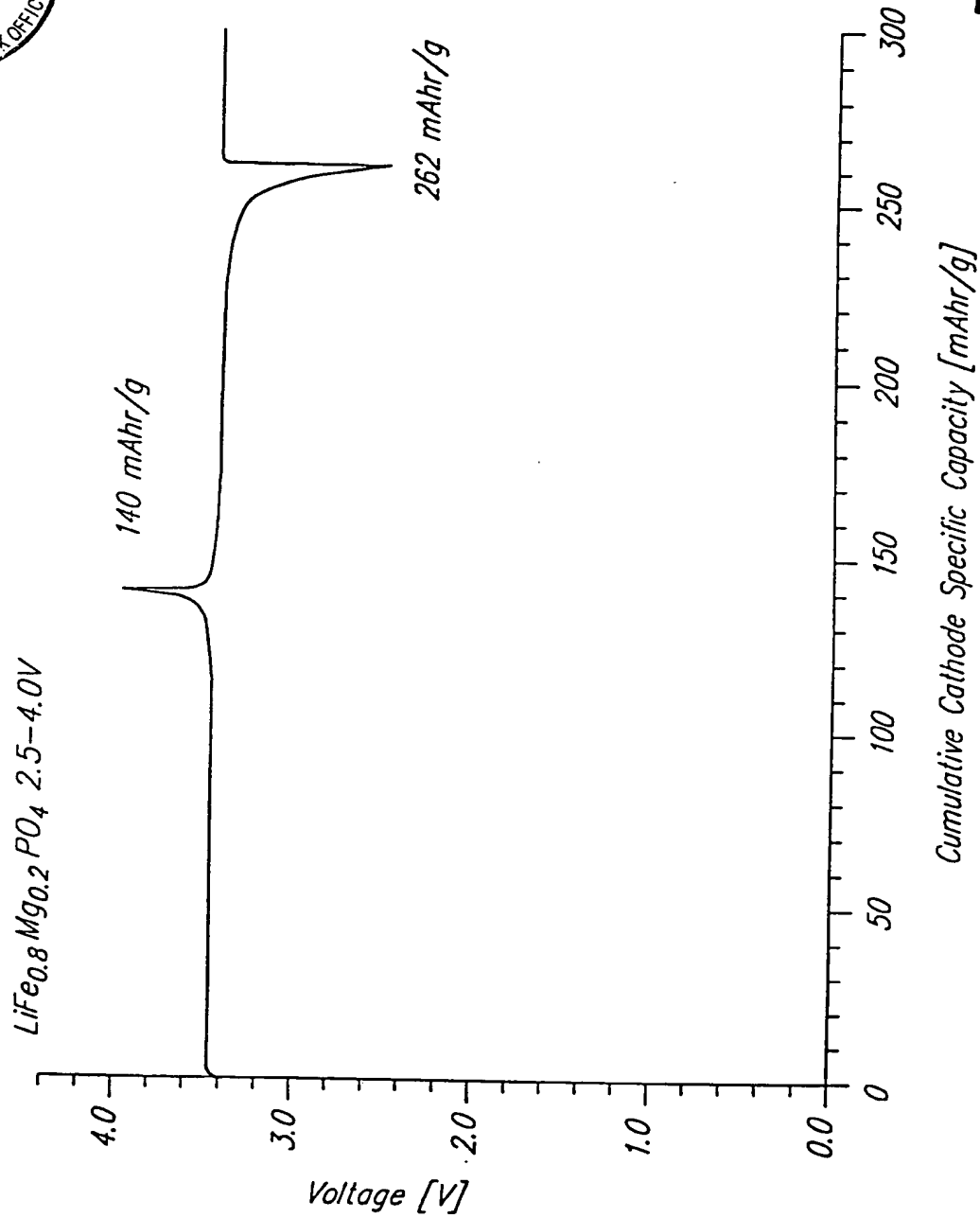


FIG. 1.



8/22

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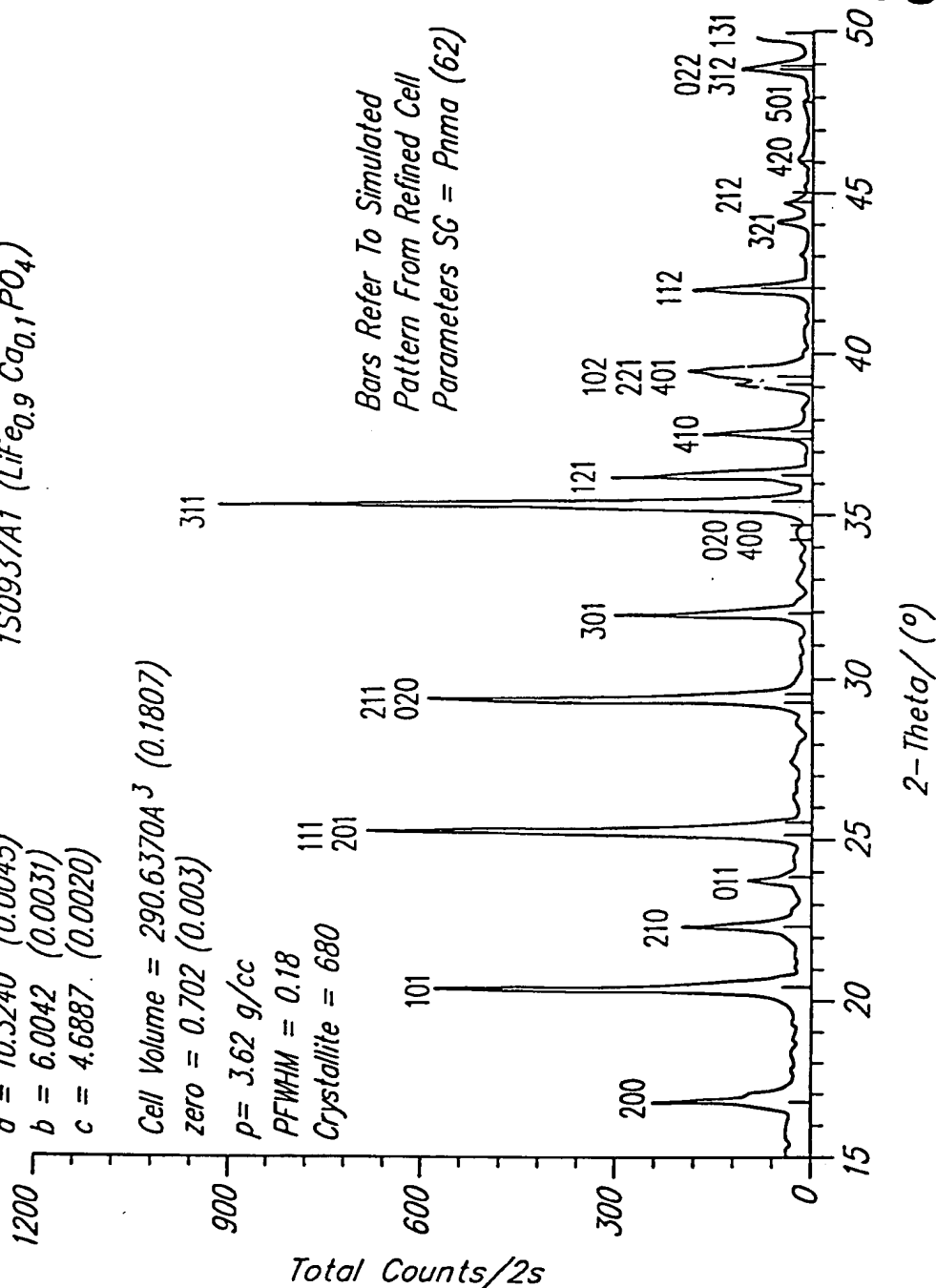
1S0937A1 (LiFe<sub>0.9</sub>Ca<sub>0.1</sub>PO<sub>4</sub>)

$a = 10.3240$  (0.0045)  
 $b = 6.0042$  (0.0031)  
 $c = 4.6887$  (0.0020)

Cell Volume =  $290.6370 \text{ \AA}^3$  (0.1807)  
 zero = 0.702 (0.003)

$\rho = 3.62 \text{ g/cc}$   
 PFWHM = 0.18  
 Crystallite = 680

Bars Refer To Simulated  
 Pattern From Refined Cell  
 Parameters SG = Pnma (62)



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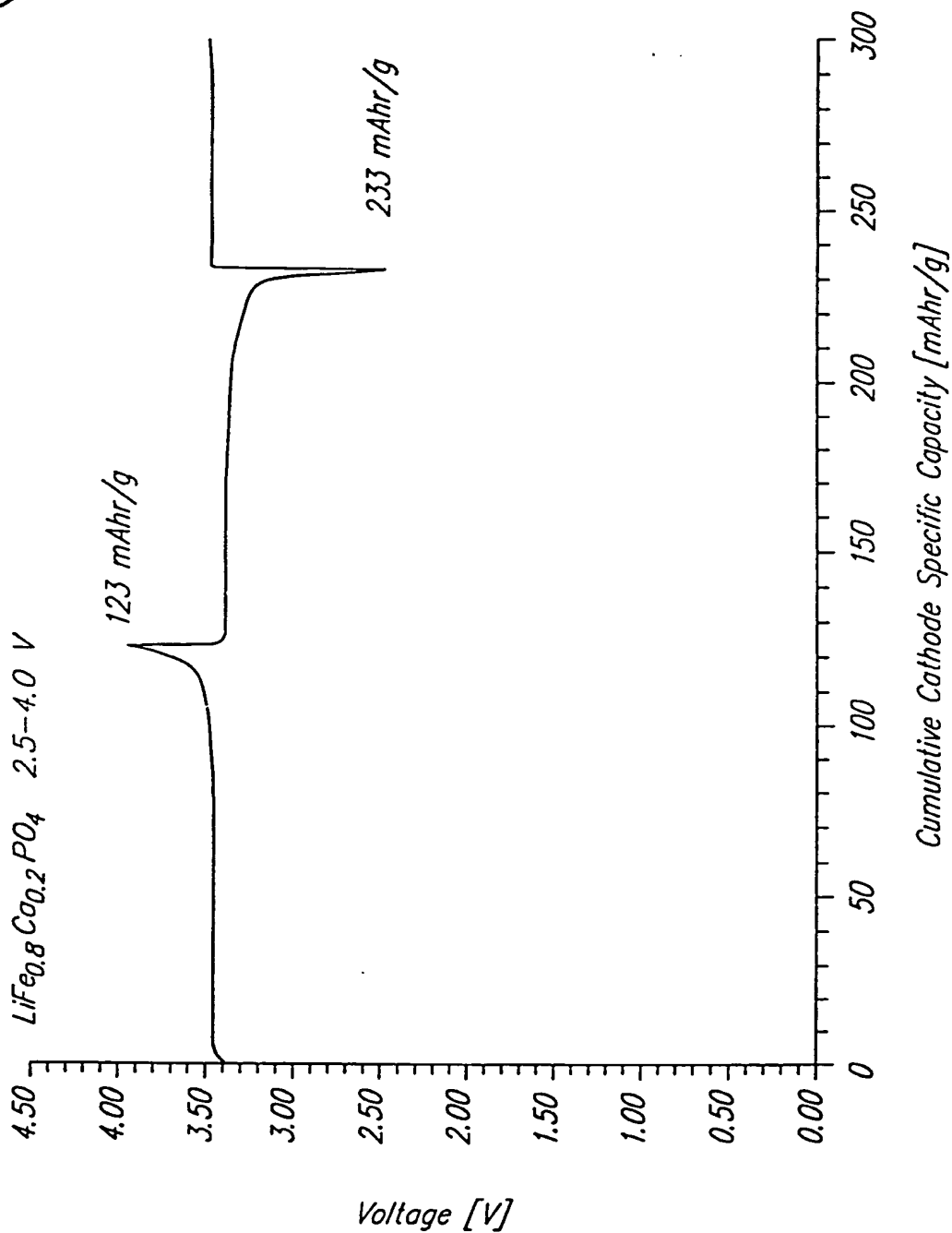


9/22

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10/22

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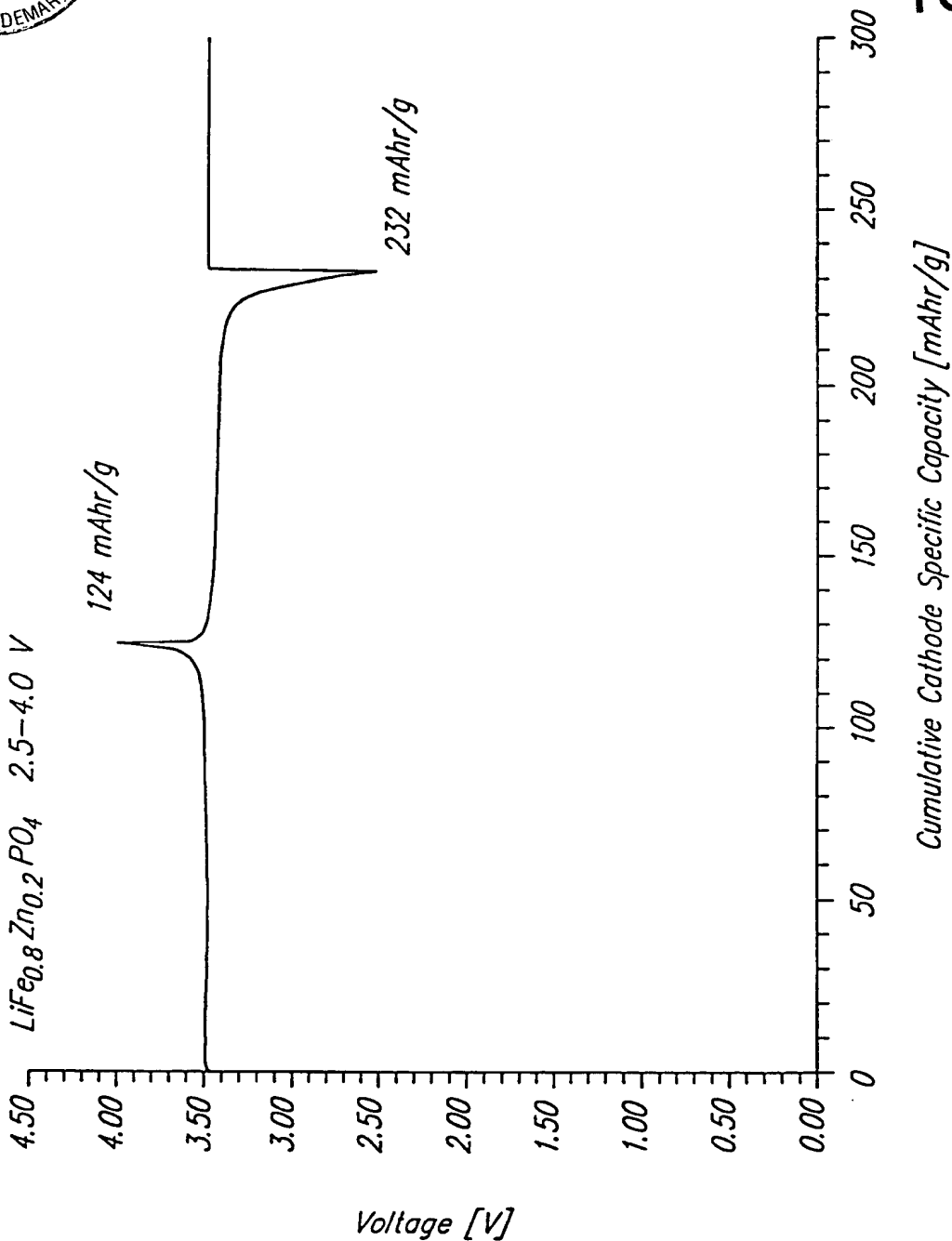


FIG. 1



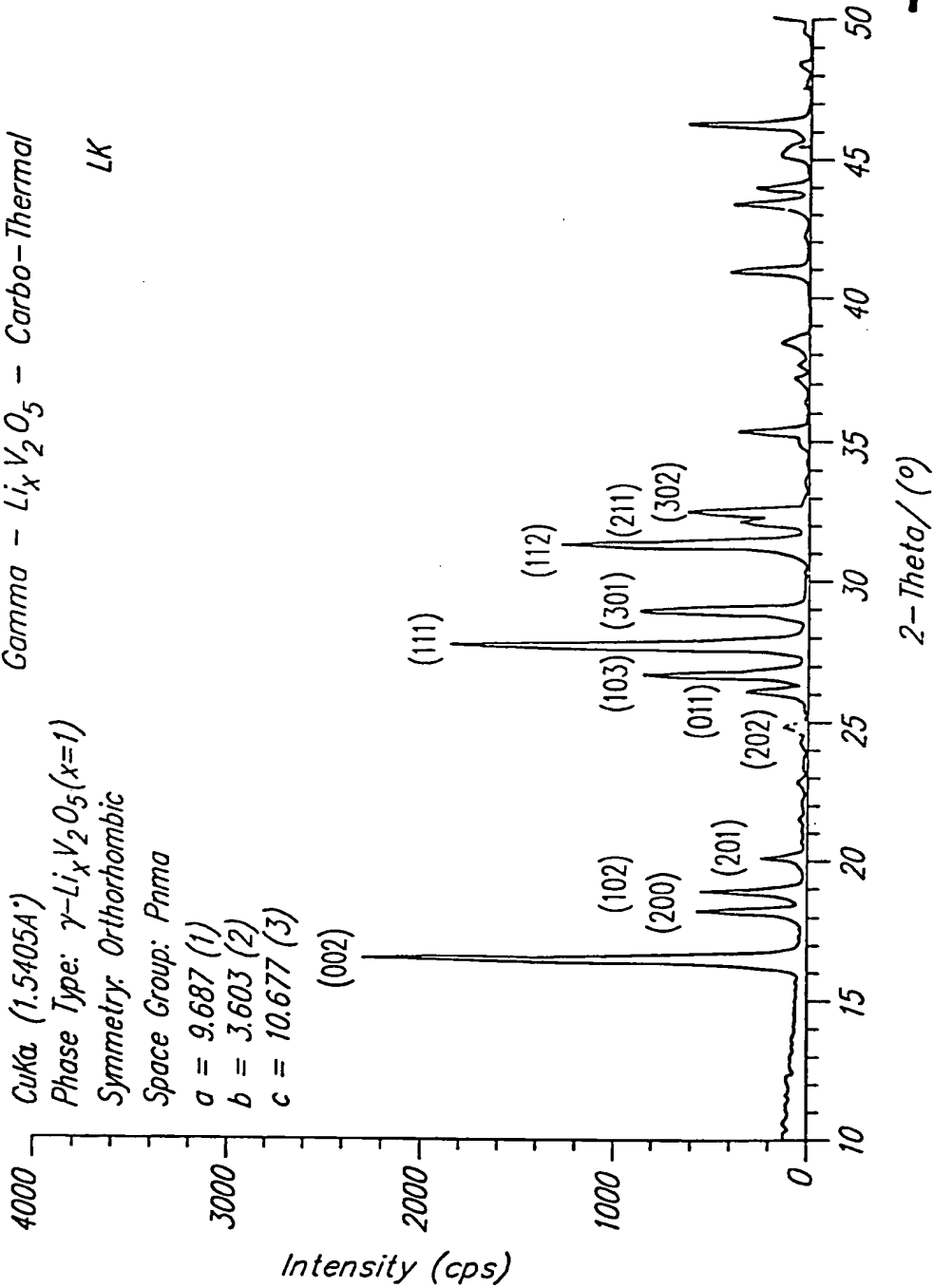
11/22

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Gamma -  $\text{Li}_x\text{V}_2\text{O}_5$  - Carbo-Thermal

LK

CuK $\alpha$  (1.54054)  
 Phase Type:  $\gamma\text{-Li}_x\text{V}_2\text{O}_5$  ( $x=1$ )  
 Symmetry: Orthorhombic  
 Space Group: Pnma  
 $a = 9.687$  (1)  
 $b = 3.603$  (2)  
 $c = 10.677$  (3)



111



12/22

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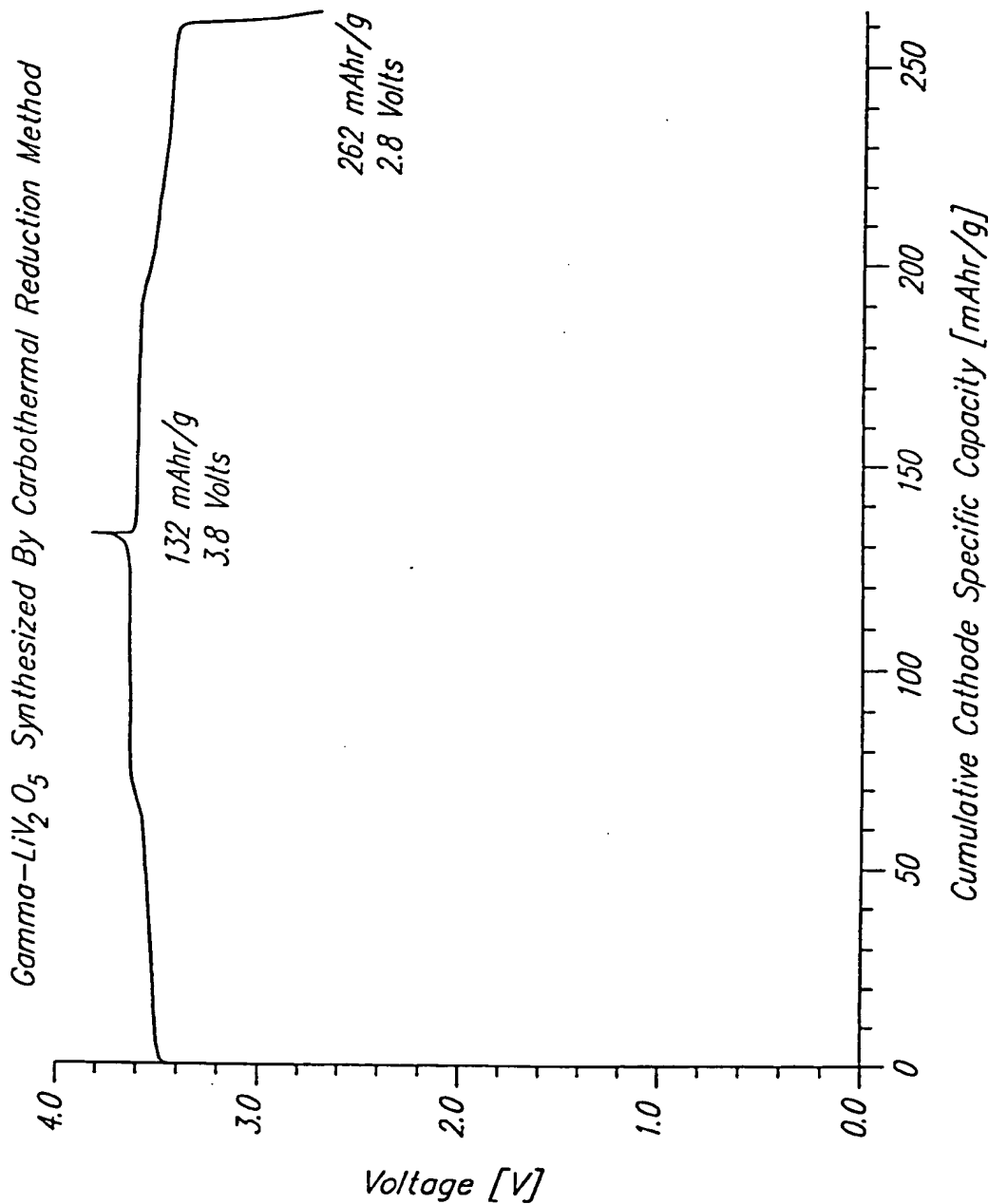


FIG. 12.



13/22

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Carbothermal Reduction Method

Gamma-LiV<sub>2</sub>O<sub>5</sub> vs. Li  
~C/2 Rate, 3.0-3.75V

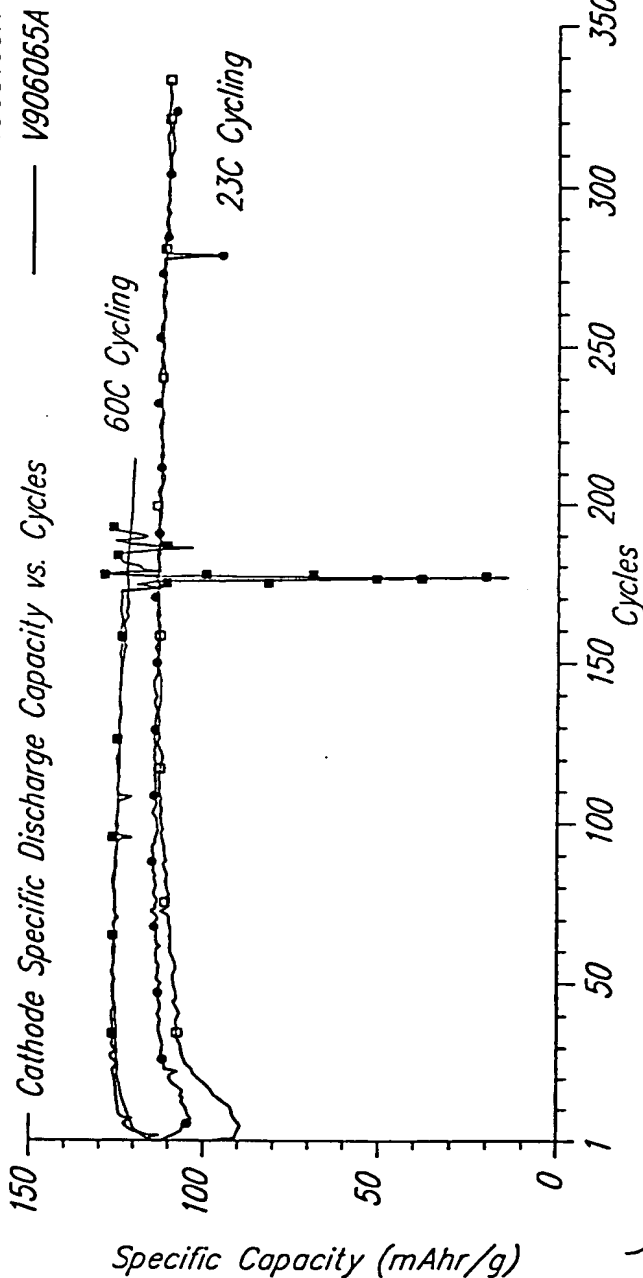
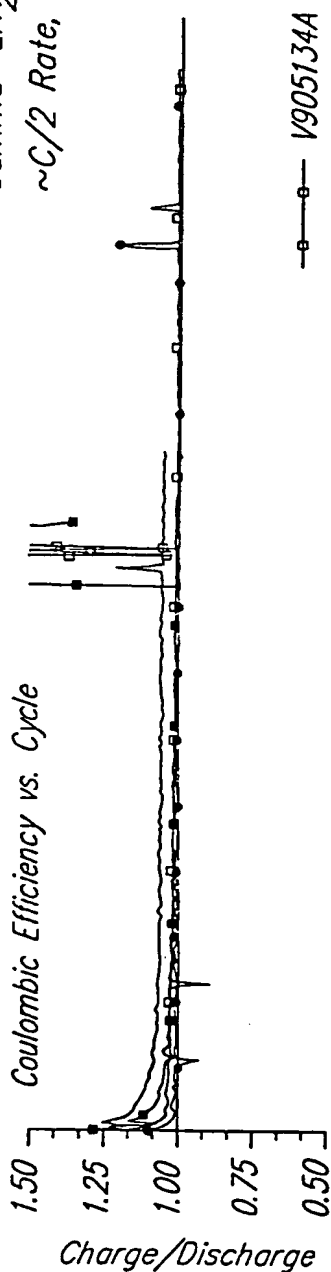


FIG. 13.



14/22

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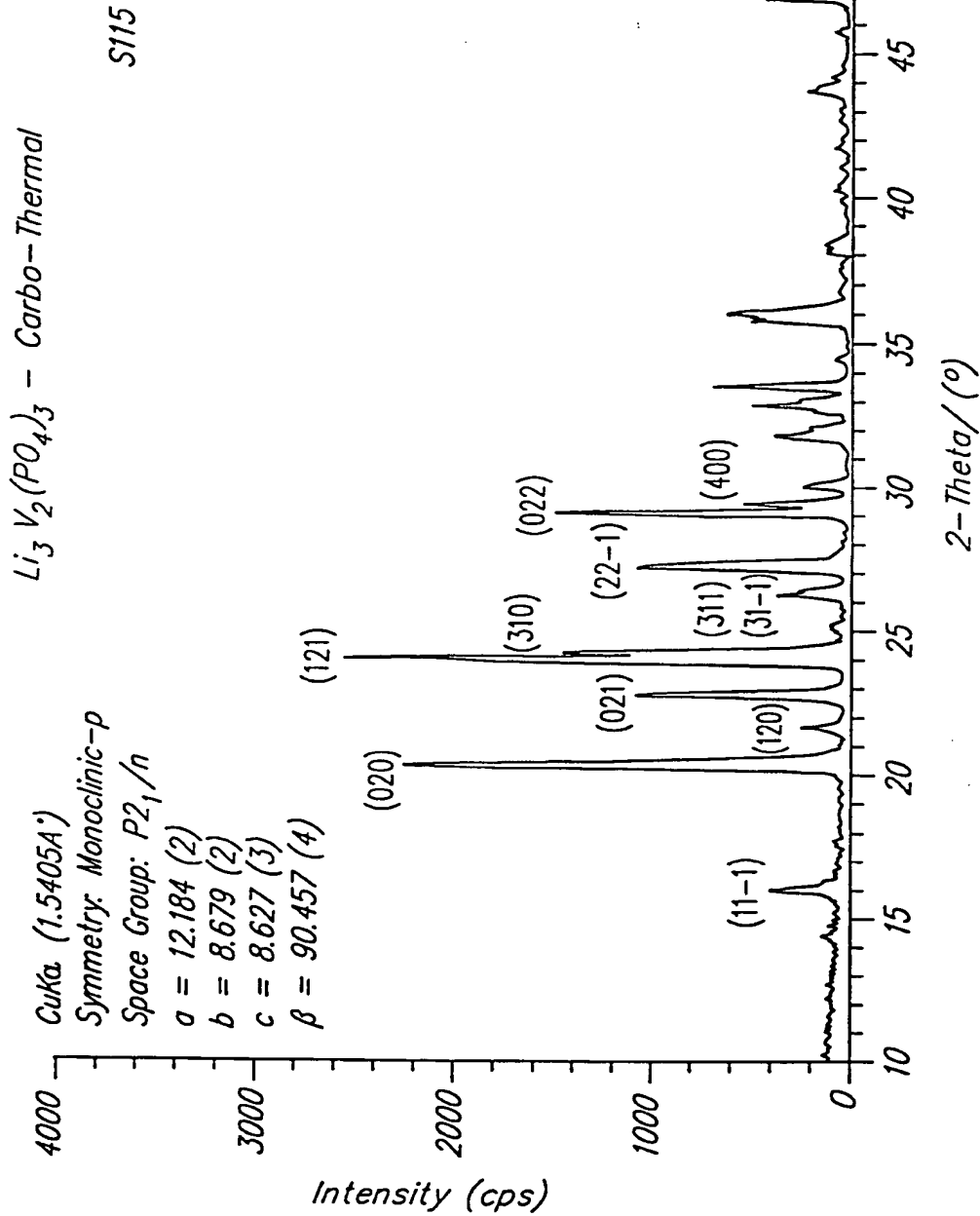


FIG. 14.



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09/484,799  
01/18/00  
Barker et al.  
LITHIUM-BASED ACTIVE MATERIALS AND PREPARATION THEREOF

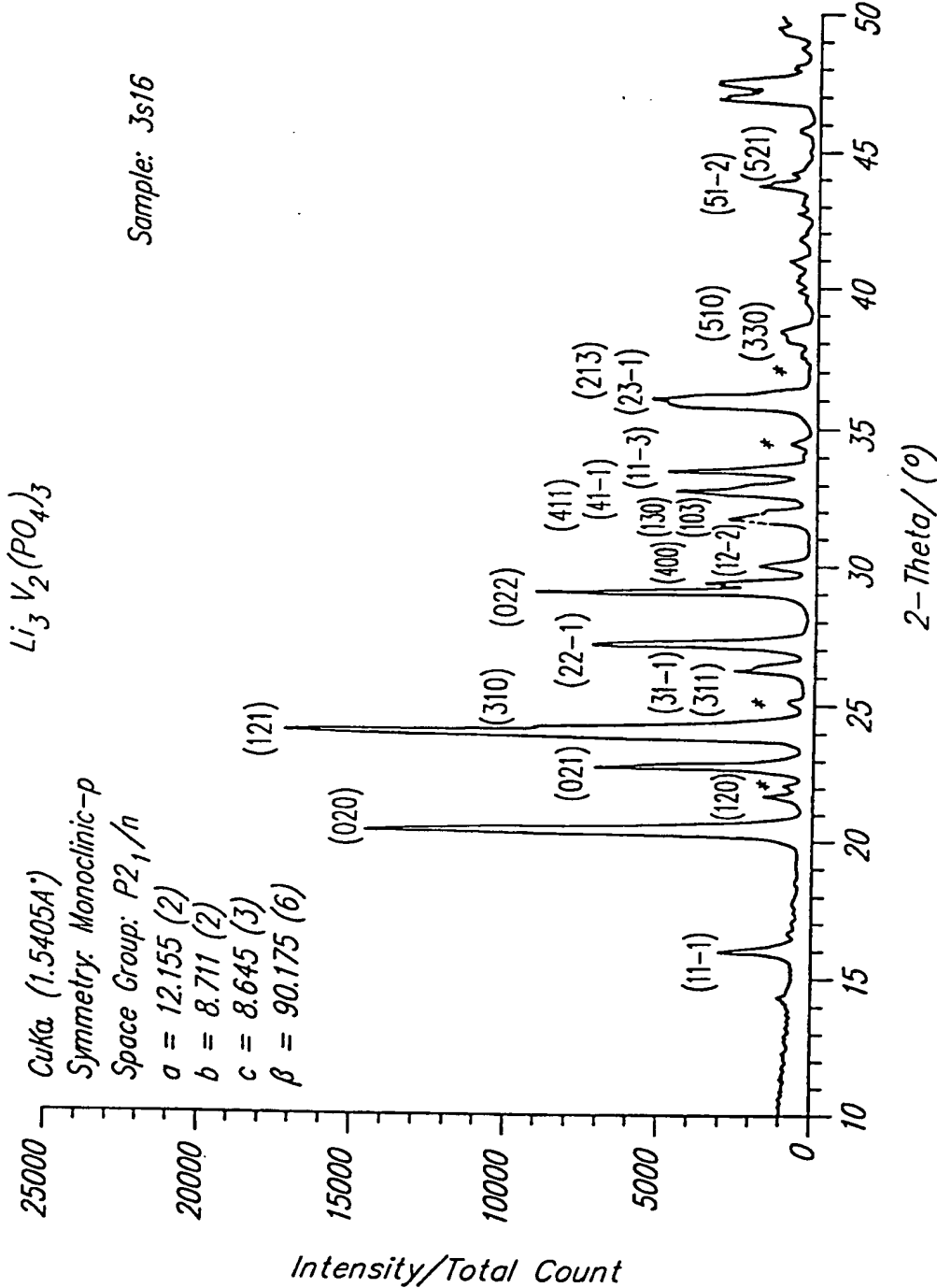
15/22

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TC 1700

Sample: 3s16



1101.15



16/22

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$\text{Li}_3\text{V}_2(\text{PO}_4)_3$  Synthesis By Carbothermal Reduction Method 13.8 mg Active

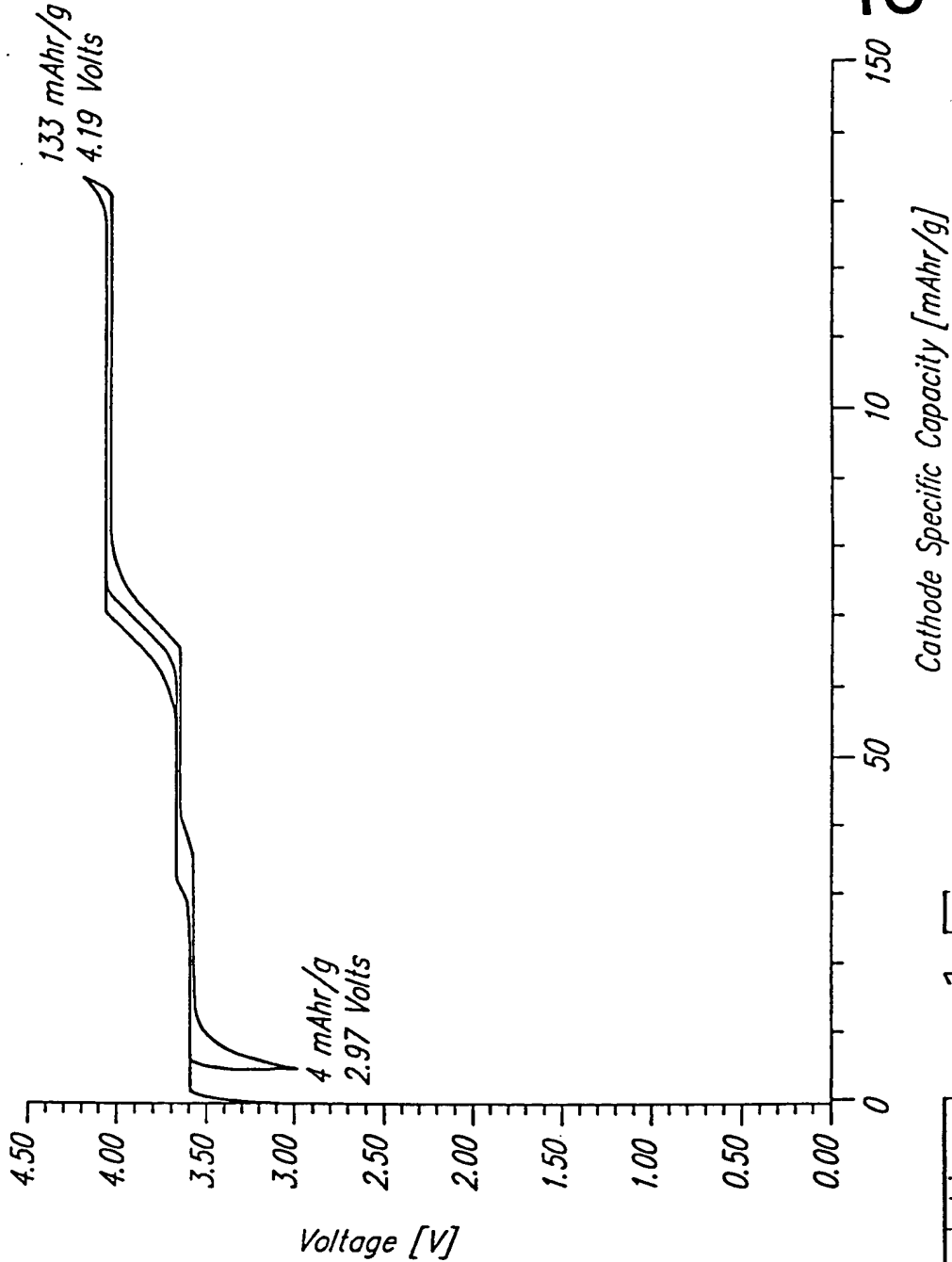


FIG. 1B.

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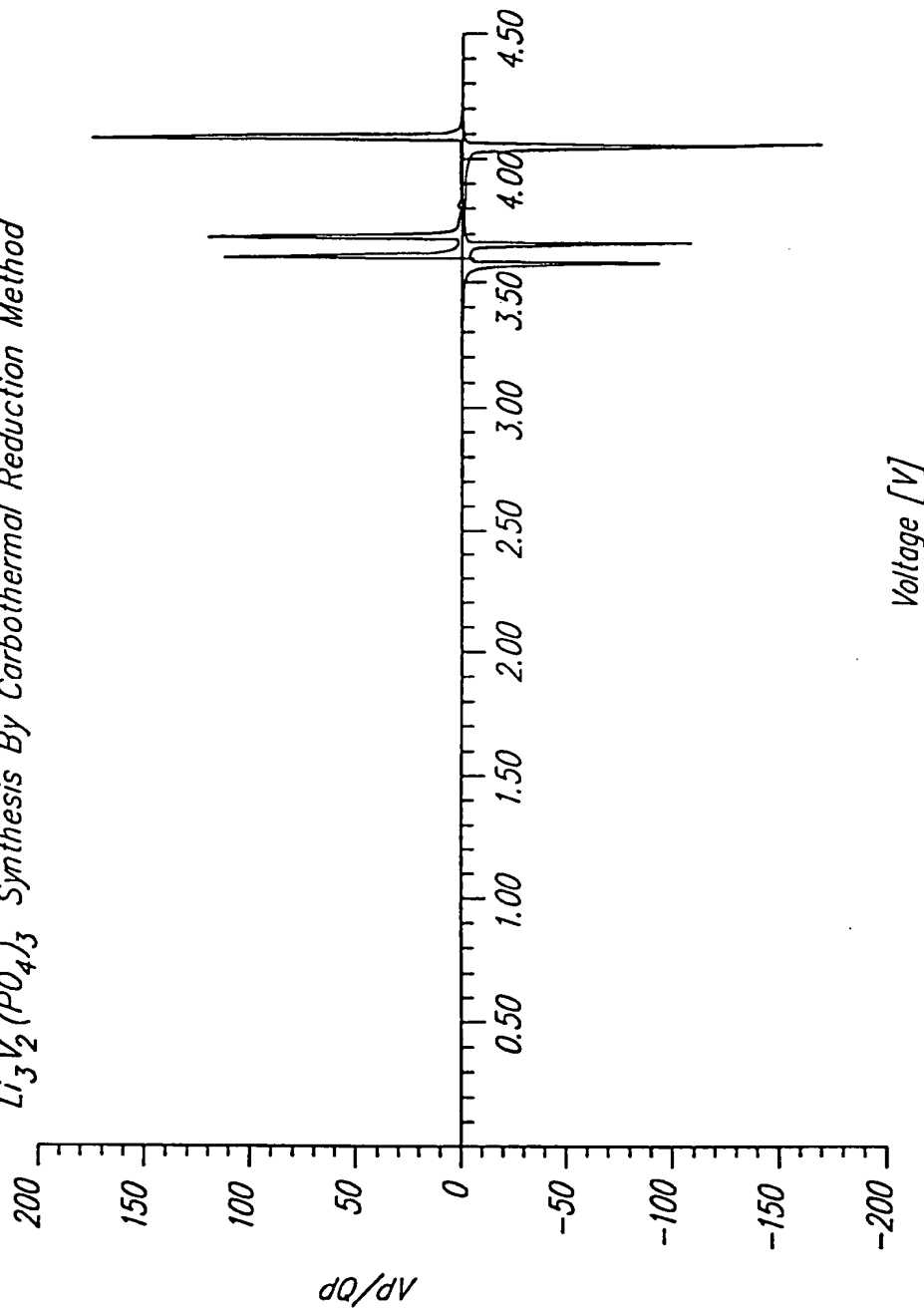
17/22

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$\text{Li}_3\text{V}_2(\text{PO}_4)_3$  Synthesis By Carbothermal Reduction Method



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18/22

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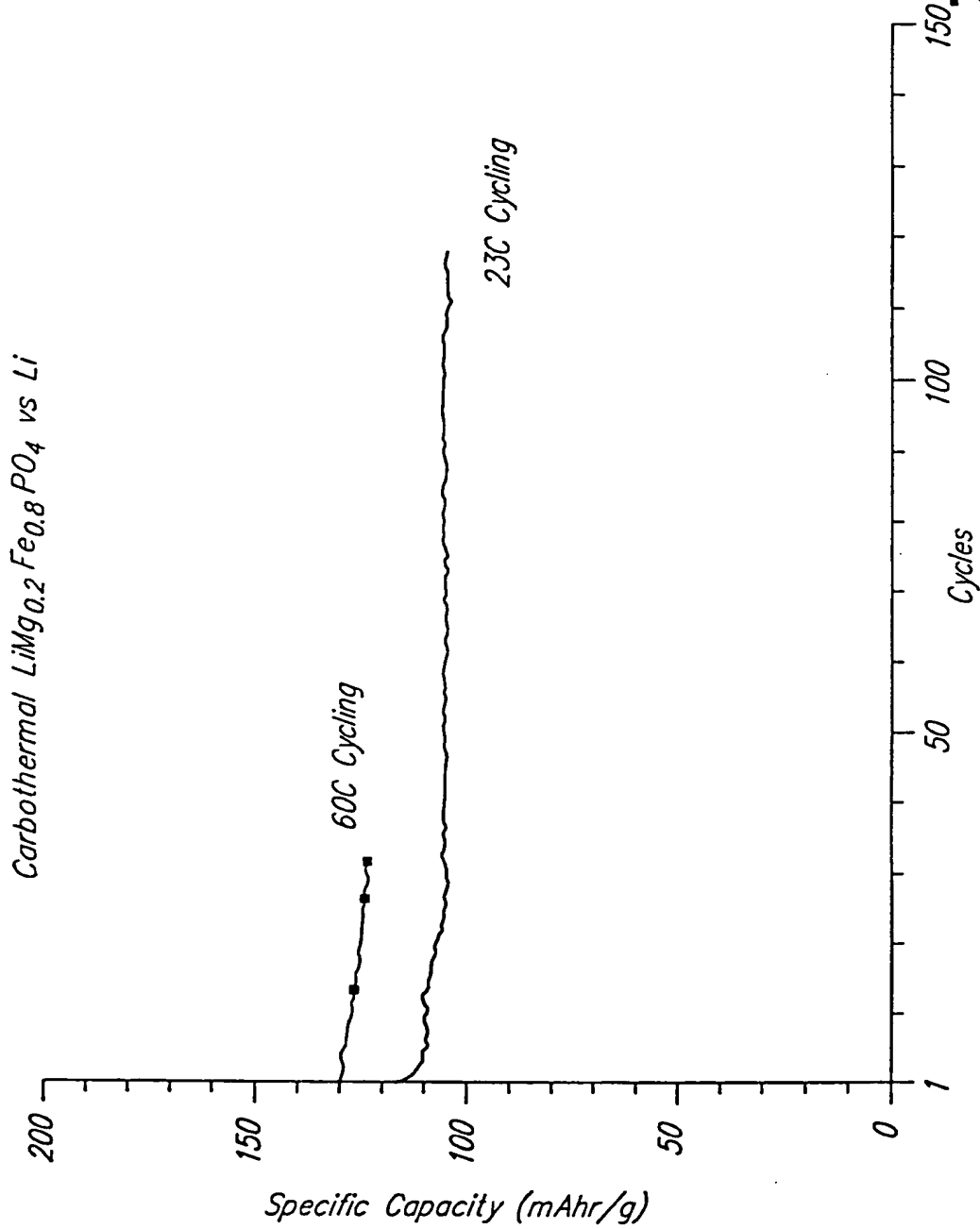


FIG. 1B.



19/22

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Voltage Profile For  $\text{LiMg}_{0.1}\text{Fe}_{0.9}\text{PO}_4$  vs MCMB

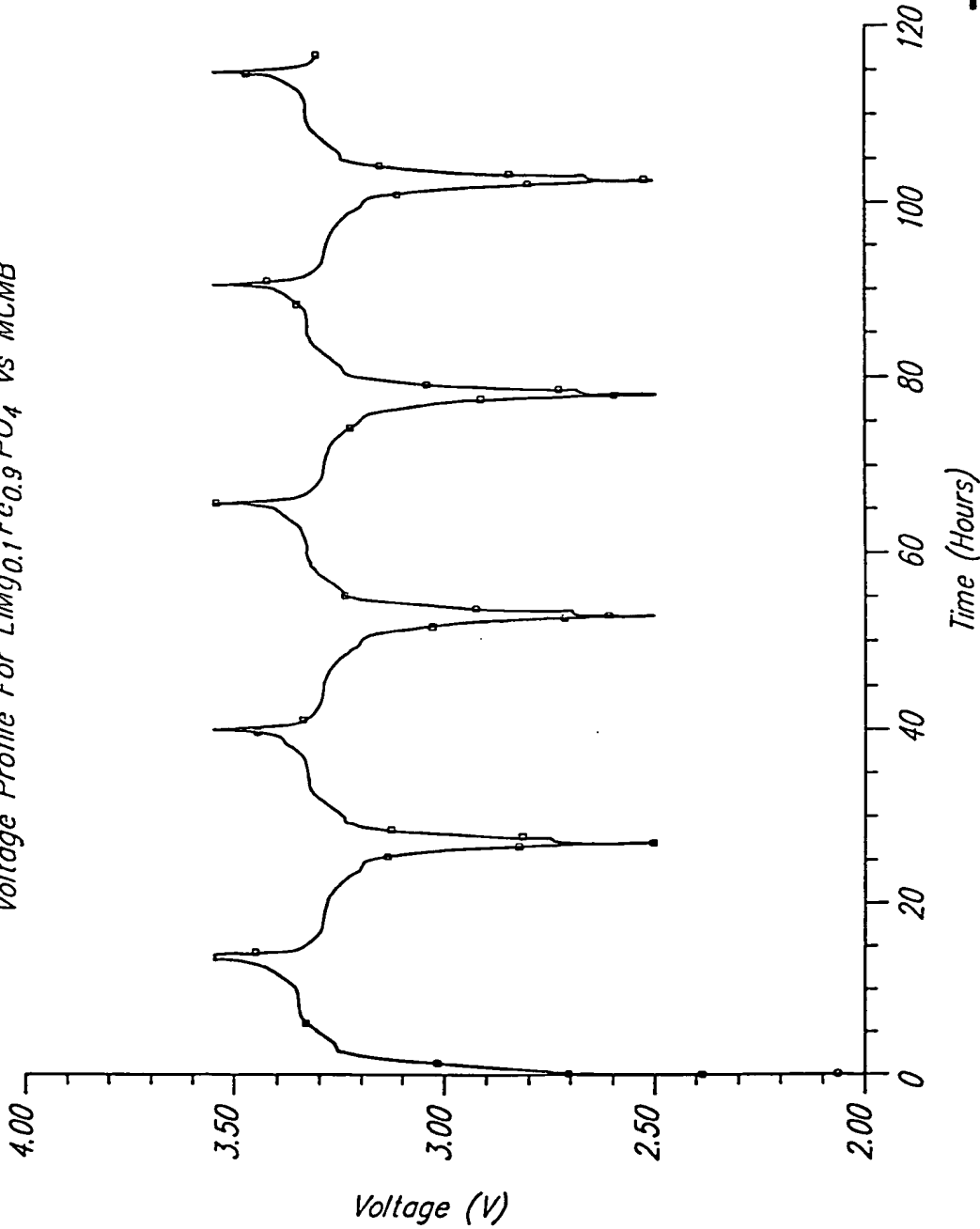


FIG. 19.



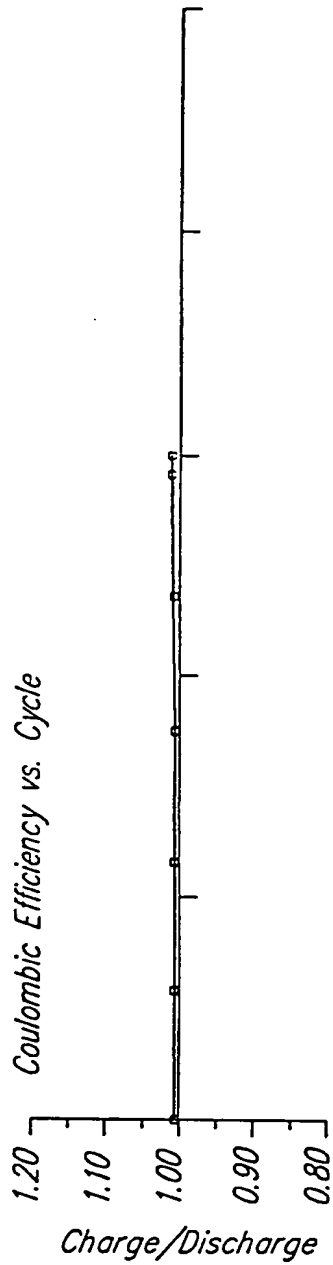
20/22

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*Carbothermal  $\text{LiMg}_{0.1}\text{Fe}_{0.9}\text{PO}_4$  vs MCMB*



*Cathode Specific Discharge Capacity vs. Cycles*

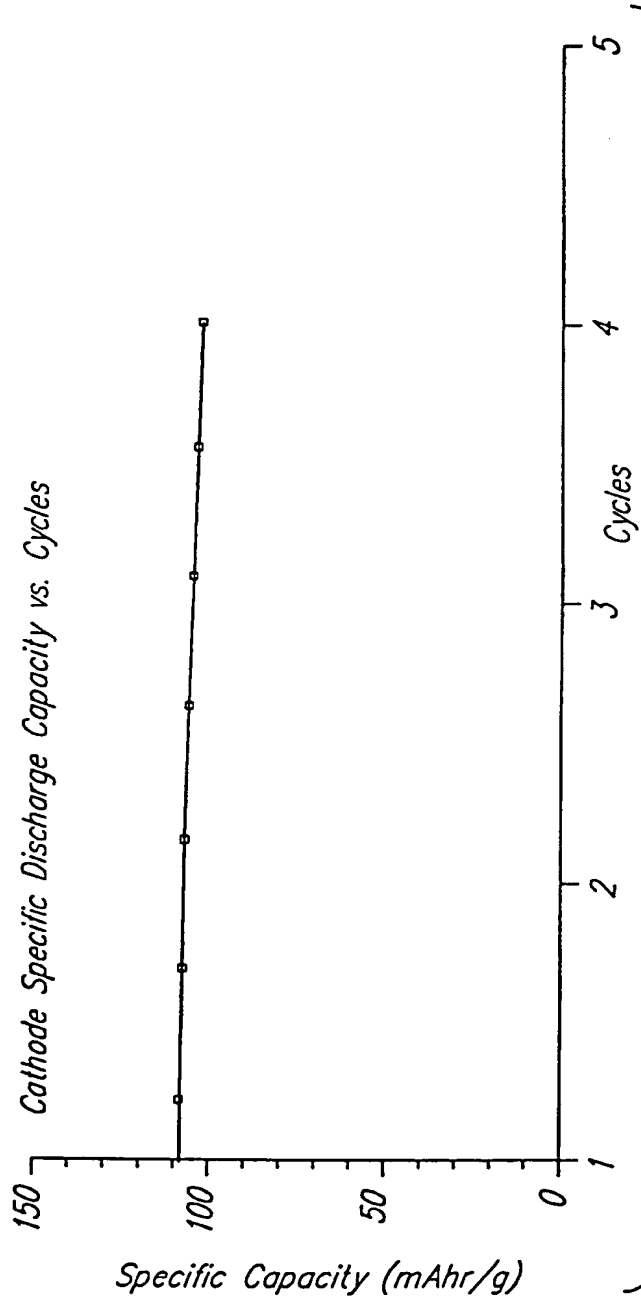


FIG. 20.



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21/22

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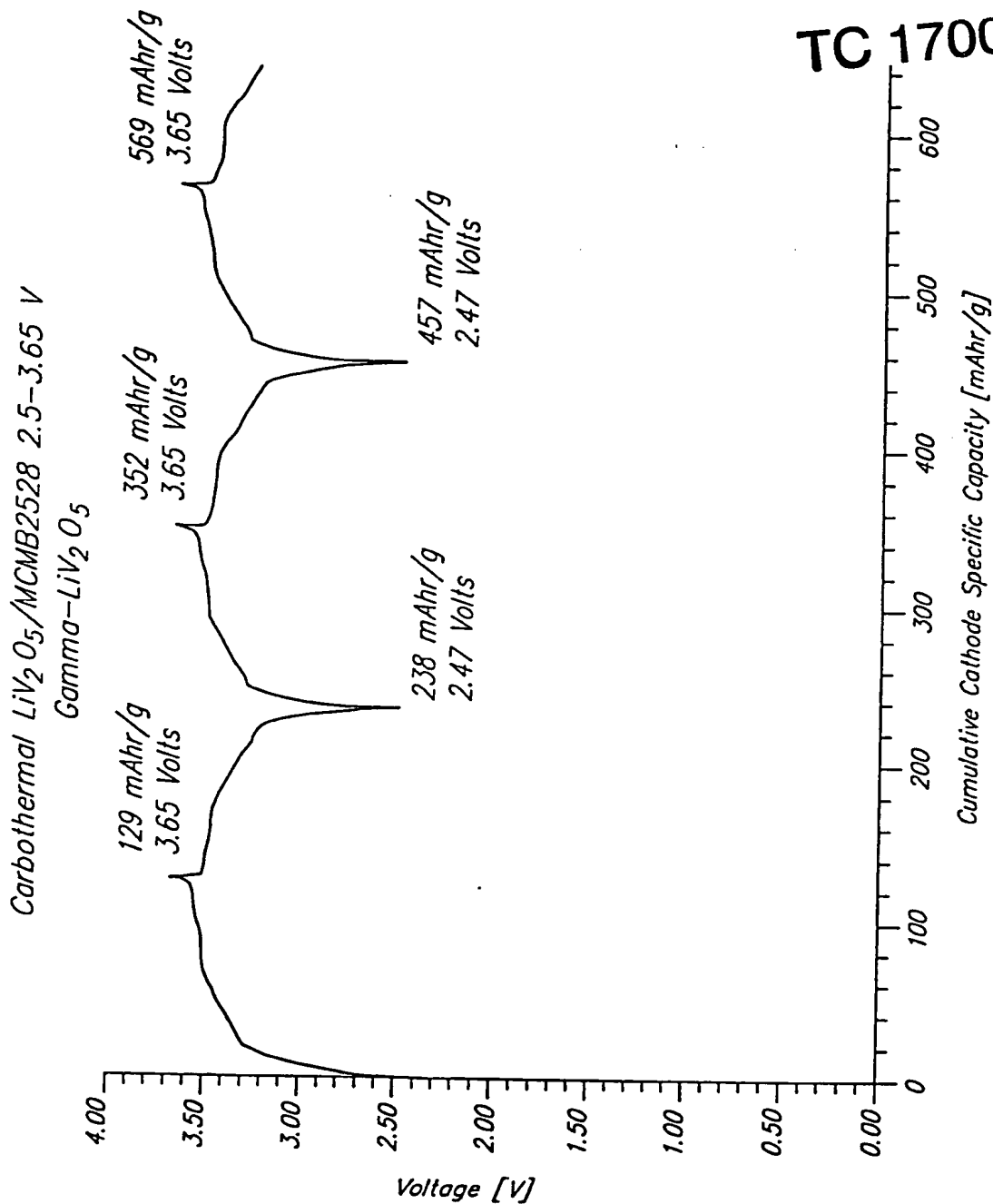


FIG. 21



22/22

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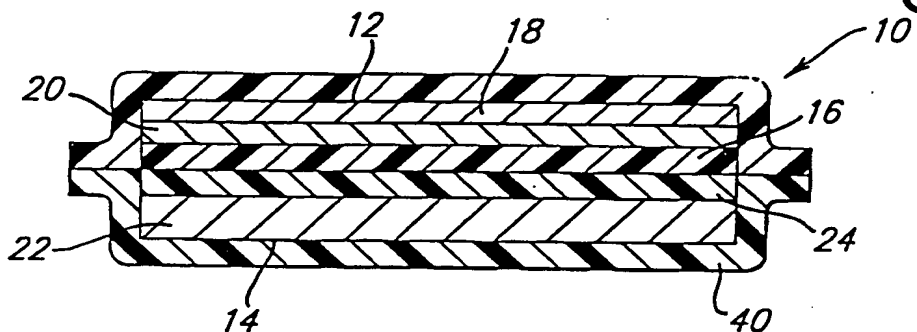


FIG. 22.

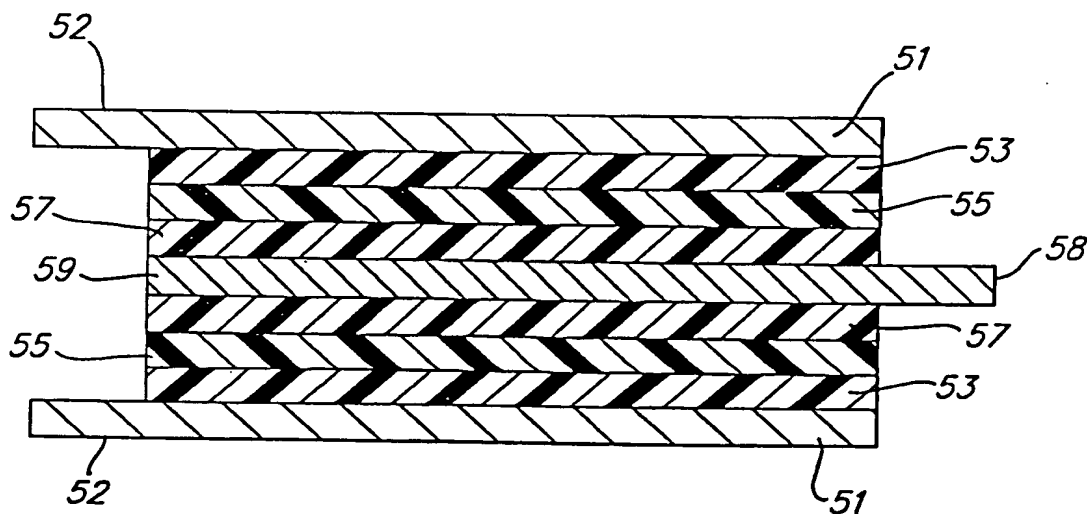


FIG. 23.